## Response to Complaint of Sewage Discharge into Lake Killarney:

## Narrative:

The Department recently investigated a complaint of a discharge of raw sewage into the North end of Lake Killarney. Department staff responded immediately and conducted multiple follow up inspections throughout the investigation. At no time did staff find any evidence that the discharge into Lake Killarney contained sewage. There are no onsite wastewater treatment systems in the immediate area; staff did not identify any upgradient discharges of sewage to the ground surface or into any roadway ditches. Throughout the investigation, staff consulted with the McHenry/Lake County Soil and Water Conservation District, the McHenry County Storm Water Engineer, the Lakes Management Unit of the Lake County Health Department, the Illinois Department of Public Health and the Illinois Environmental Protection Agency (IEPA). An IEPA Engineer III, from the Bureau of Water, met onsite with staff and also evaluated the complaint.

The source of the water discharge was identified to be from the wooded ravine, surrounded by an agricultural field, to the North of Lake Killarney. It could not be determined if the discharge originates from a natural seep or an interrupted storm water conduit. Water samples were collected from the discharge point, the inlet to the road culvert, the outlet of the culvert, the lake at the outfall of the culvert and Killarney East and Killarney West public beaches. Samples were analyzed for E.coli, fecal coliform, fecal streptococcus, pH, and specific conductivity. The bacterial levels were very low and confirmed that the discharge into the lake is not wastewater. A sample of a white substance in the flooded water on the vegetation and snails was collected and evaluated by IEPA staff. The IEPA indicated that it is <u>not</u> toilet paper, but appears to be a fungus. The ratio of fecal coliform to fecal streptococcus in the water sample taken at the culvert invert on August 10, 2017 was below 1, which indicates that the low levels of fecal bacteria are most likely from animal influences.

The Department has concluded that the discharge associated with the complaint is not a discharge of sewage and does not represent an immediate public health risk to swimmers in Lake Killarney.

Please direct any questions to the Division of Environmental Health at 815-334-4585.

Prepared by: McHenry County Department of Health Division of Environmental Health August 17, 2017

## **Summary of Water Sample Results:**

Sample Location	Sample Date	E.coli cfu/100 ml	Fecal Coliform cfu/100 ml	Fecal Streptococcus cfu/100 ml	Fc/Fs	рН	Specific Conductivity
Discharge Source	8/3/17	28.80					
Culvert Inlet	8/3/17	15.80					
Lake at Culvert Outfall	8/3/17	47.10					
Killarney West Shallow	8/3/17	7.30					
Killarney West Deep	8/3/17	1.0					
Killarney East Shallow	8/3/17	4.10					
Killarney East Deep	8/3/17	6.30					
Culvert Inlet	8/9/17	20.30				7.57	1036
Lake at Culvert Outfall	8/9/17	34.10				7.62	1035
Culvert Inlet	8/10/17		27	500	.054		
Killarney West	8/10/17		520	430	1.209		